

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012082**Date Inspected:** 14-Feb-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr.Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder( OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

**OBG TRIAL ASSEMBLY**

SEGMENT: 7AE-7BE (Panel Point # 49)

The following Non Destructive Testing (NDT) Inspection carried out on Segment: 7AE-7BE.

**Visual Inspection (VT)**

This QA Inspector performed random VT of Segment: 7AE-7BE Panel Point#49 on "T"Ribs.

During Quality Assurance VT review of "T"Rib base metal, this Quality Assurance Inspector (QA) discovered the following issues:

**SIDE PLATE (BK SIDE)**

- One (1) Arc Strike on Segment 7BE -9th "T"Rib (counting form BK side) base metal.
- One (1) Arc Strike on Segment 7BE -11th "T"Rib (counting form BK side) base metal.
- One (1) Arc Strike on Segment 7BE -13th "T"Rib (counting form BK side) base metal.

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- One (1) Arc Strike on Segment 7AE -14th "T"Rib (counting form BK side) base metal.
- One (1) Arc Strike on Segment 7BE -14th "T"Rib (counting form BK side) base metal.
- One (1) Arc Strike on Segment 7BE -17th "T"Rib (counting form BK side) base metal.
- Two (2) Arc Strikes on Longitudinal Diaphragm (LD) @Panel Point #49.5.

### BOTTOM PLATE

- One (1) Arc Strike on Segment 7AE -5th "T"Rib (counting form BK side) base metal.

### SIDE PLATE (CB SIDE)

- One (1) Arc Strike on Segment 7AE -1st "T"Rib (counting form BK side) base metal.
- One (1) Arc Strike on Segment 7AE -8th "T"Rib (counting form BK side) base metal.
- Two (2) Arc Strikes on Longitudinal Diaphragm (LD) @Panel Point #49.75.

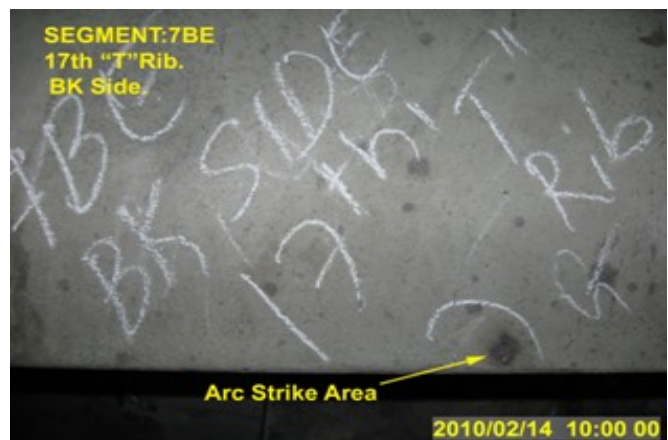
The above issue has been informed to the Team Leader for further action.

Applicable reference: Section 9.2.2.1 of the ZPMC Welding Quality Control Plan (WQCP)

"The surface defects such as pitting, arc strikes and compress marks shall be repaired by grinding and arc gouge excavation if necessary. The ground surface shall be transitioned smoothly. If the thickness after grinding is within the allowance shall have no need for repairing weld. Magnet Particle test shall be performed for the arc strike area after grinding for verifying no more defects."

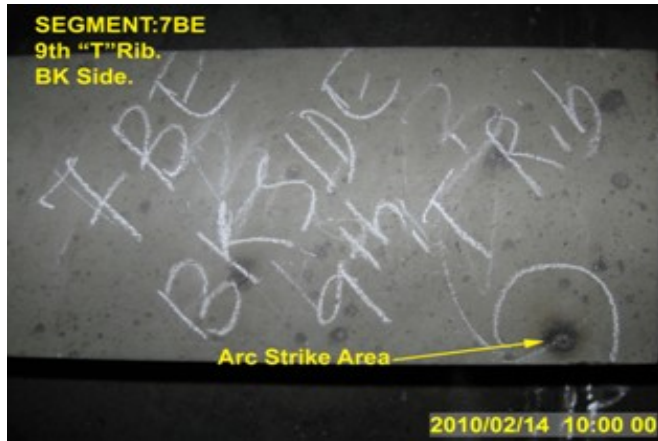
(The attached photographs provide additional detail.)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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### Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Prabhu,Surendra

Quality Assurance Inspector

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**Reviewed By:** Miller,Mark

QA Reviewer